

Atty. Docket No.: CQ10191  
**PATENT APPLICATION**

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Application No.: 09/987,420

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1.     *(Currently Amended)* A method of dynamic personalized reading instruction comprising the steps of:
  - determining a first word recognition level of a user;
  - displaying words to the user based on the determined first word recognition level from a set of words classified by word recognition levels;
  - providing at least one comprehension aid to the user, the provided comprehension aid operable to help the user to comprehend the displayed words;
  - determining word recognition errors based on user comprehension of [[a]] the displayed words using the at least one comprehension aid provided to the user; and
  - determining a second word recognition level of the user based on the determined word recognition errors.
2.     *(Previously Presented)* The method of claim 1, wherein the first word recognition level is determined based on at least one of: age, scholastic grade and level within the grade, and an interactive test sequence.
3.     *(Original)* The method of claim 1, wherein at least one of a set of words in the set of words classified by word recognition level is associated with a comprehension aid.

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4. *(Original)* The method of claim 3, wherein the comprehension aid is a human sensible explanation of the concept of at least one classified word.

5. *(Previously Presented)* The method of claim 4, wherein the human sensible explanation of the concept is at least one of: a graphic icon, an animation, audio information, and video information.

6. *(Currently Amended)* A method of dynamic personalized reading instruction comprising the steps of:

determining a text;

analyzing the text based on a theory of discourse analysis;

determining a first user reading level;

displaying a grammatical tunable text summary to the user based on the determined user reading level;

providing at least one comprehension aid to the user, the provided comprehension aid operable to help the user to comprehend the text;

determining user comprehension of the text using the at least one comprehension aid provided to the user; and

determining a further user reading levels based on the user comprehension and reading level.

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7.     *(Previously Presented)* The method of claim 6, further comprising the step of displaying salient information from the grammatical tunable text summary based on at least one of: a user request, determined reading speed, and determined comprehension level.
8.     *(Previously Presented)* The method of claim 7, wherein the text is analyzed based on at least one of: the Discourse Structures Theory, Linguistic Discourse Model, Rhetorical Structure Theory, Systemic Functional Grammar, and Tagmemics.
9.     *(Previously Presented)* The method of claim 7, wherein a first user reading level is determined based on at least one of: age, academic grade and level within the grade, and interactive test performance.
10.    *(Original)* The method of claim 9, wherein at least one comprehension aid is associated with at least one portion of the grammatical tunable text summary.
11.    *(Original)* The method of claim 10, wherein the at least one comprehension aid is a human sensible concept explanation for at least one of the portions of the grammatical tunable text summary.
12.    *(Previously Presented)* The method of claim 11, wherein the at least one comprehension aid includes at least one of: a graphic icon, an animation, audio information, and video information.

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13. *(Currently Amended)* A method of combined word and sentence level dynamic personalized reading instruction comprising the steps of:
- providing word level dynamic personalized instruction comprising the steps of:
    - determining a first word recognition level of a user;
    - displaying to the user words based on the determined first word recognition level from a set of words classified by word recognition levels;
    - providing at least one comprehension aid to the user, the provided comprehension aid operable to help the user to comprehend the displayed words;
    - determining word recognition error based on user comprehension of a word using the at least one comprehension aid provided to the user;
    - determining a second word recognition level of the user based on the determined user word recognition errors;
  - providing sentence level dynamic personalized instruction comprising the steps of:
    - determining a text;
    - analyzing the text based on a theory of discourse analysis;
    - determining a first user reading level;
    - displaying a grammatical tunable text summary based on the determined reading level;
    - determining user comprehension of the text; and
    - determining a second user reading level based on the user comprehension and reading level.

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14. (*Currently Amended*) A system for dynamic personalized reading instruction comprising:
- a controller;
  - a memory for storing words and comprehension aids classified by word recognition levels;
  - a word recognition level determining circuit for determining a word recognition level of a user;
  - a word display circuit for displaying to the user words from the stored words based on the determined word recognition level;
  - a recognition error determining circuit for determining user recognition errors;
  - a comprehension aid display circuit for displaying comprehension aids to the user based on the determined user recognition errors; and
  - a word recognition level adjusting circuit adjusting the word recognition level of the user based on the determined recognition user errors.
15. (*Previously Presented*) The system of claim 14, wherein a first word recognition level is determined based on at least one of: age, scholastic grade and level within the grade, and an interactive test sequence.
16. (*Original*) The system of claim 14, wherein at least one of a set of words in the set of words classified by word recognition level is associated with a comprehension aid.

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17. *(Original)* The system of claim 16, wherein the comprehension aid is a human sensible explanation of the concept of at least one classified word.

18. *(Previously Presented)* The system of claim 17, wherein the human sensible explanation of the concept is at least one of: a graphic icon, an animation, audio information, and video information.

19. *(Previously Presented)* A system for dynamic personalized reading instruction comprising:

- a memory;
- an input/output circuit for loading a selected text into the memory;
- a discourse analysis circuit for analyzing the text;
- a grammatical tunable text summary generating circuit for determining a grammatical tunable text summary of the analyzed text;
- a text determining circuit for determining display text based on a determined reading level information of a user;
- a comprehension question generating circuit for generating comprehension questions to the user based on the grammatical tunable text summary; and
- a controller for determining a new reading level of the user based on at least one of the determined user comprehension and reading speed.

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20. *(Previously Presented)* The system of claim 19, wherein salient information from the grammatical tunable text summary is displayed based on at least one of: a user request, determined reading speed, and determined comprehension.

21. *(Previously Presented)* The system of claim 19, wherein the text is analyzed based on at least one of: the Discourse Structures Theory, Linguistic Discourse Model, Rhetorical Structure Theory, Systemic Functional Grammar, and Tagmemics.

22. *(Previously Presented)* The system of claim 19, wherein a first user reading level is determined based on at least one of: age, academic grade and level within the grade, and interactive test performance.

23. *(Original)* The system of claim 22, wherein at least one comprehension aid is associated with at least one portion of the grammatical tunable text summary.

24. *(Original)* The system of claim 23, wherein the at least one comprehension aid is a human sensible concept explanation for at least one of the portions of the grammatical tunable text summary.

25. *(Previously Presented)* The system of claim 24, wherein the at least one comprehension aid includes at least one of: a graphic icon, an animation, audio information, and video information.

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26. *(Previously Presented)* A system of combined word and sentence level dynamic personalized reading instruction comprising:

a word level dynamic personalized instruction comprising:

a controller;

a memory for storing words, comprehension aids classified by word recognition levels and a text;

a word recognition level determining circuit for determining a word recognition level of a user;

a word display circuit for displaying words from the stored words based on the determined word recognition level;

a recognition error determining circuit for determining user recognition errors;

a comprehension aid display circuit for displaying comprehension aids to the user based on the determined user recognition errors;

a word recognition level adjusting circuit adjusting the word recognition level based on the determined user recognition errors; and

a sentence level dynamic personalized instruction circuit comprising:

an input/output circuit for loading a selected text into the memory;

a discourse analysis circuit for analyzing the text;

a grammatical tunable text summary generating circuit for determining a grammatical tunable text summary of the analyzed text;



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a text determining circuit for determining display text based on a determined reading level information of the user;

a comprehension question generating circuit for generating comprehension questions to the user based on the grammatical tunable text summary; and

a controller for determining a new reading level of the user based on at least one of the determined user comprehension and reading speed.

27. (*Previously Presented*) A method of dynamic personalized reading instruction comprising the steps of:

determining a text in a first language;

analyzing the text based on a theory of discourse analysis;

determining a first reading level of a user;

displaying a grammatical tunable text summary based on the determined reading level;

determining user comprehension errors for the text;

displaying comprehension aids based on at least the determined user comprehension errors, a language of instruction, and the determined user reading level; and

determining a second user reading level based on the user comprehension and reading level.

28. (*Currently Amended*) A carrier wave encoded to transmit a control program usable for dynamic personalized reading instruction to a device for executing the control program, the control program including instructions comprising:

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instructions for determining a first word recognition level of a user;  
instructions for displaying words based on the determined word recognition level of a user from a set of words classified by word recognition levels:

instructions for providing at least one comprehension aid to the user, the provided comprehension aid operable to help the user to comprehend the displayed words;

instructions for determining word recognition errors based on user comprehension of a word using the at least one comprehension aid provided to the user; and

instructions for determining a second word recognition level of a user, the first word recognition level being dynamically adjusted based on the determined word recognition errors.

29. *(Currently Amended)* A carrier wave encoded to transmit a control program usable for dynamic personalized reading instruction to a device for executing the control program, the control program including instructions comprising:

instructions for determining a text;  
instructions for analyzing the text based on a theory of discourse analysis;  
instructions for determining a first user reading level;  
instruction for displaying a grammatical tunable text summary based on the determined reading level;

instructions for providing at least one comprehension aid to the user, the provided comprehension aid operable to help the user to comprehend the displayed text;

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instructions for determining user comprehension of the text using the at least one comprehension aid provided to the user; and

instructions for determining a further user reading levels based on the user comprehension and reading level.

30. *(Currently Amended)* A computer readable storage medium, comprising a computer readable program code embodied on the computer readable storage medium, the computer readable program code usable to program a computer to perform dynamic personalized reading instruction further comprising the steps of:

instructions for determining a first word recognition level of a user;

instructions for displaying to the user words based on the determined word recognition level from a set of words classified by word recognition levels;

instructions for providing at least one comprehension aid to the user, the provided comprehension aid operable to help the user to comprehend the displayed words;

instructions for determining word recognition errors based on user comprehension of a word using the at least one comprehension aid provided to the user; and

instructions for determining a second word recognition level of the user, the first word recognition level being dynamically adjusted based on the determined word recognition errors.

31. *(Currently Amended)* A computer readable storage medium, comprising a computer readable program code embodied on the computer readable storage medium, the

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computer readable program code usable to program a computer to perform dynamic personalized reading instruction further comprising the steps of:

instructions for determining a text;

instructions for analyzing the text based on a theory of discourse analysis;

instructions for determining a first user reading level;

instruction for displaying to the user a grammatical tunable text summary based on the determined reading level;

instructions for providing at least one comprehension aid to the user, the provided comprehension aid operable to help the user to comprehend the displayed text;

instructions for determining user comprehension of the text using the at least one comprehension aid provided to the user; and

instructions for determining a further user reading levels based on the user comprehension and reading level.